

CLAIMS

1. A disengageable connector for interconnecting panels, the connector comprising;
a longitudinally extending connector body, the connector body including a base and a
projection extending from the base;
the base includes a top surface and a bottom surface, and at least one footing member
extending downwardly from the bottom surface of the base, the footing member being shaped and
dimensioned to compress the upper surface of a resilient pad positioned beneath the connector and
the panels.
2. The connector according to claim 1, wherein the projection extends vertically from the top
surface of the base, the projection having top and bottom portions, and comprising right and left
halves for insertion into edges of adjacent panels to be connected.
3. The connector according to claim 1, further including two protrusions extending vertically
from the base, the protrusions are spaced apart from the projection and are located on either side of
the projection.
4. The connector according to claim 3, wherein the base includes first and second footing
members respectively positioned beneath the protrusions.
5. The connector according to claim 4, wherein the protrusions extend substantially the entire
length of the connector.

6. The connector according to claim 4, further including a third footing member positioned beneath the projection.
7. The connector according to claim 6, wherein a recess is formed between the first footing member and the third footing member and a recess is formed between the second footing member and the third footing member.
8. An interlocking flooring system, comprising:
a plurality of flooring panels, each flooring panel including a plurality of edges;
a first connecting member for connecting adjacent flooring panels and a second connecting member for connecting adjacent flooring panels, the first connecting member being different from the second connecting member and providing greater resistance to disengagement of adjacent flooring panels when compared to the second connecting member; and
a resilient pad positioned beneath the flooring panels.
9. The interlocking flooring system according to claim 8, wherein each flooring panel includes at least one short edge and at least one long edge, and the first connecting member is shaped and dimensioned for coupling the at least one short edge to an adjacent flooring panel and the second connecting member is shaped and dimensioned for coupling the at least one long edge to an adjacent flooring panel.
10. The interlocking flooring system according to claim 8, wherein the first connecting member includes a longitudinally extending connector body, the connector body including a base and a

15. The interlocking flooring system according to claim 14, further including a third footing member positioned beneath the projection.

16. A disengageable connector for interconnecting panels, the connector comprising;
a longitudinally extending connector body, the connector body including a base having a longitudinal extent with a first end and a second end, the connector further including a projection extending vertically from a top surface of the base;
wherein the projection extends beyond the longitudinal extent of the base along at least one end of the base to define an outwardly extending ear.

17. The connector according to claim 16, wherein the projection includes a top portion and a bottom portion, the projection further including right and left halves for insertion into edges of adjacent panels to be connected.

18. The connector according to claim 16, wherein the base includes a bottom surface and at least one footing member extends downwardly from the bottom surface of the base, the footing member being shaped and dimensioned to compress the upper surface of a resilient pad positioned beneath the connector and flooring panels.

19. The connector according to claim 16, further including two protrusions extending vertically from the base, the protrusions are spaced apart from the projection and are located on either side of the projection beyond a lateral extent of the extensions.

20. The connector according to claim 19, wherein each protrusion extends beyond the longitudinal extent of the base along at least one end of the base to form a locking tab.

21. An interlocking flooring system, comprising:

a plurality of flooring panels, each flooring panel includes first and second long edges and first and second short edges, each flooring panel also including first and second grooves in an underside of the flooring panel respectively adjacent the first and second short edges;

the first and second long edges respectively include integral connecting members shaped and dimensioned such that the connecting member of the first long edge will engage the connecting member of the second long edge of an adjacent flooring panel;

a distinct connector shaped and dimensioned for coupling the first or second short edges of adjacent flooring panels, the connector includes a longitudinally extending connector body, the connector body including a base and a projection extending from the base; the base includes a top surface and a bottom surface, the base further includes two protrusions extending vertically from the top surface, the protrusions being spaced apart from the projection and being located on either side of the projection in a position to grip the first and second grooves formed along the underside of the flooring panels.

projection extending from the base; the base includes a top surface and a bottom surface, and at least one footing member extending downwardly from the bottom surface of the footing member, the footing member being shaped and dimensioned to compress the upper surface of the resilient pad positioned beneath the connector and flooring panels.

11. The interlocking flooring system according to claim 10, wherein the second connecting member includes a longitudinally extending connector body, the connector body including a base and a projection extending from the base; the base includes a top surface and a bottom surface.

12. The interlocking flooring system according to claim 10, wherein the second connecting member includes a tongue extending from an edge of a flooring panel and a groove extending from an edge of an adjacent flooring panel.

13. The interlocking flooring system according to claim 10, wherein the first connecting member includes two protrusions extending vertically from the base, the protrusions are spaced apart from the projection and are located on either side of the projection beyond a lateral extent of the extensions; and the second connecting member includes two protrusions extending vertically from the base, the protrusions are spaced apart from the projection and are located on either side of the projection beyond a lateral extent of the extensions .

14. The interlocking flooring system according to claim 13, wherein the at least one footing member includes first and second footing members respectively positioned beneath the protrusions.

22. The flooring system according to claim 21, wherein the connector includes at least one footing member extending downwardly from the bottom surface of the footing member, the footing member being shaped and dimensioned to compress an upper surface of a resilient pad positioned beneath the connector and flooring panels.

23. The flooring system according to claim 22, wherein the base includes first and second footing members respectively positioned beneath the protrusions.

24. The flooring system according to claim 23, further including a third footing member positioned beneath the projection.

25. The flooring system according to claim 21, wherein the flooring panels include a backing layer along the underside and the first and second grooves are cut into the backing layer such that the protrusions grip the backing layer.

26. The flooring system according to claim 21, further including a resilient pad positioned beneath the flooring panels.